

Exhibit 19

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

VIRTAMOVE, CORP.,

Plaintiff,

v.

HEWLETT PACKARD ENTERPRISE
COMPANY,

Defendant.

Civil Action No. 2:24-CV-00093-JRG
(Lead Case)

JURY TRIAL DEMANDED

VIRTAMOVE, CORP.,

Plaintiff,

v.

INTERNATIONAL BUSINESS MACHINES
CORP.,

Defendant.

Civil Action No. 2:24-CV-00064-JRG
(Member Case)

JURY TRIAL DEMANDED

DEFENDANT HEWLETT PACKARD ENTERPRISE COMPANY'S
INVALIDITY CONTENTIONS

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of the art at the time of the alleged inventions of the Asserted Patents. HPE reserves the right to rely on additional prior art that may be uncovered during its continuing investigation and discovery.

In addition, many of the prior art references have related patent applications, publications, or issued patents that contain the same or materially the same subject matter (*e.g.*, published U.S. patent applications and publications, issued U.S. patents, and foreign applications or issued patents). Any citation to or quotation from any of these applications, publications, or patents, therefore, should be understood as encompassing any parallel citation to the same subject matter in other related or corresponding patent applications, publications, or issued patents.

Also, to the extent not expressly stated herein, HPE incorporates by reference any and all prior art contained or identified in documents produced thus far by VirtaMove in this case, each reference identified in all Appendices to these Invalidity Contentions, and any and all materials regarding invalidity that should have been timely produced by VirtaMove months ago.

A. Prior Art Patents and Published Patent Applications

The table below identifies patents and patent publications now known to HPE that qualify as prior art to the Asserted Patents under at least 35 U.S.C. §§ 102(a), (b), (e), and/or (g). Each listed reference became prior art at least as early as the dates provided on the face of the document, as indicated in the chart below, and/or as indicated in the corresponding Appendix. HPE reserves the right to rely upon earlier dates of publication or public availability to the extent such information is uncovered during discovery. HPE also reserves the right to rely on fact or expert witness testimony to establish the publication and/or public availability of any publications described below. Each Appendix identified by an “A” pertains to the ’814 Patent, and each Appendix identified by a “B” pertains to the ’058 Patent.

Table 1: Prior Art Patents and Published Patent Applications				
Patent Number	Title	Date(s)	Short Name	Appendix
U.S. 7,461,080	System Logging Within Operating System Partitions Using Log Device Nodes That Are Access Points to A Log Driver	Priority: 5/9/2003 Filed: 12/22/2003 Issued: 12/2/2008	Tucker '080	A-1
U.S. 7,437,556	Global Visibility Controls for Operating System Partitions	Priority: 5/9/2003 Filed: 1/21/2004 Issued: 10/14/2008	Tucker '556	A-2
U.S. 60/469,558	N/A	Filed: 5/9/2003	Tucker Provisional	A-3
U.S. 2003/0014466	System and Method for Management of Compartments in a Trusted Operating System	Filed: 6/29/2001 Pub: 1/16/2003	Berger '466	A-4 B-16
U.S. 2002/0194496	Multiple Trusted Computing Environments	Priority: 6/7/2002 Filed: 6/18/2002 Issued: 1/4/2011	Griffin	A-5
U.S. 2002/0124072	Virtual Computing Environment	Filed: 7/30/2001 Pub.: 9/5/2002	Tormasov	A-6
U.S. 2002/0174215	Operating System Abstraction and Protection Layer	Filed: 5/16/2001 Pub. 11/21/2002	Schaefer	A-7
U.S. 2003/0084436	System and Method for Installing Applications In A Trusted Environment	Filed: 10/30/2001 Pub.: 5/1/2003	Berger '436	A-16 B-17
U.S. 7,962,950	System and Method for File System Mandatory Access Control	Filed: 6/29/2001 Pub.: 1/9/2003	Choo '950	A-17 B-18
U.S. 6,976,037	Method and Systems for DLL/COM Redirection	Priority: 3/27/2000 Filed: 6/27/2000 Issued: 12/13/2005	D'Souza	B-1
U.S. 6,529,985	Selective Interception of System Calls	Filed: 2/4/2000 Issued: 3/4/2003	Deianov	B-2
U.S. 7,673,308	Virtual OS Computing Environment	Filed: 11/18/2003 Issued: 3/2/2010	McMillan	A-20

Table 1: Prior Art Patents and Published Patent Applications				
Patent Number	Title	Date(s)	Short Name	Appendix
U.S. 5,961,582	Distributed and Portable Execution Environment	Filed: 10/25/1994 Issued: 10/5/1999	Gaines	A-21
U.S. 6,966,010	Application Container That Allows Concurrent Execution on Multiple Nodes in a Cluster	Filed: 8/31/2001 Issued: 11/15/2005	Curtis	A-22
U.S. 2003/0177285	Operating System Application Programming Interfaces and Methods of Using Operating Systems	Priority: 6/16/1999 Filed: 3/10/2003 Pub.: 9/18/2003	Hunt	B-21
U.S. 8,032,625	Method and System for a Network Management Framework With Redundant Failover Methodology	Filed: 6/29/2001 Issued: 10/4/2011	Benfield	B-22
U.S. 5,572,709	Using Dynamically-Linked Libraries to Add Side Effects to Operations	Filed: 6/18/1993 Issued: 11/5/1996	Fowler	B-23

B. Prior Art Non-Patent Publications

The table below identifies non-patent printed publications now known to HPE that qualify as prior art to the Asserted Patents under at least 35 U.S.C. §§ 102(a), (b) and/or (g). Each listed reference became prior art at least as early as the dates provided on the face of the document, as indicated in the chart below, and/or as indicated in the corresponding Appendix. HPE reserves the right to rely upon earlier dates of publication or public availability to the extent such information is uncovered during discovery. HPE also reserves the right to rely on fact or expert witness testimony to establish the publication and/or public availability of any publications described

below. Each Appendix identified by an “A” pertains to the ’814 Patent, and each Appendix identified by a “B” pertains to the ’058 Patent.

Table 2: Prior Art Printed Publications			
Title	Author/Publisher	Date	Appendix
Virtual Private Servers and Security Contexts (VServer documentation) (“Gelinas”)	Gelinas	2002	A-8
The Design and Implementation of Zap: A System for Migrating Computing Environments (“Osman”)	Osman ACM SIGOPS Operating Systems Review 36, no. SI	Dec. 2002	A-9
Supporting Ubiquitous Computing with Stateless Consoles and Computation Caches (“Schmidt”)	Schmidt	Aug. 2000	A-10
File Systems in User Space (“Eggert”)	Eggert USENIX Winter 1993 Conf.	1993	B-3
Alpine: A User-Level Infrastructure for Network Protocol Development (“Ely Paper”)	Ely USENIX Symposium on Internet Technologies and Systems (USITS 01)	2001	B-4
Shared Libraries in SunOS (“Gingell”)	Gingell	1987	B-5
Linkers and Loaders (“Levine”)	Levine	2001	B-6
Protocol Service Decomposition for High-Performance Networking (“Maeda”)	Maeda Proc. 14 th ACM Symposium on Operating System Principles	1993	B-7
Implementing Network Protocols at User Level (“Thekkath”)	Thekkath SIGCOMM Computer Communication Review	1993	B-8
Alpine: A User-Level Infrastructure for Network Protocol Development (“Ely Presentation”)	Ely 3 rd USENIX Symposium on Internet Technologies and Systems (USITS 01)	2001	B-13

Table 2: Prior Art Printed Publications			
Title	Author/Publisher	Date	Appendix
HP C++ Programmer's Guide, Fourth Edition ("HP C++ Programmer's Guide")	HP	June 1996	A-18 B-19
HP C/HP-UX Reference Manual, Ninth Edition ("HP C Compiler Reference Manual")	HP	June 2000	A-19 B-20
hp secure OS software for Linux, Release Notes, Version 1.0	HP	Aug. 15, 2001	A-14 B-14
hp secure OS software for Linux, Administration Guide, Version 1.0	HP	Aug. 15, 2001	A-14 B-14
hp secure OS software for Linux, technical product brief	HP	2001	A-14 B-14
A Secure Linux Platform, in Proceedings of the 5 th Annual Linux Showcase & Conference in Oakland, California	Nigel Edwards, Joubert Berger, Tse Huong Choo HP	Nov. 5-10, 2001	A-14 B-14
An Operating System Approach to Securing E-Services, Implementing Trusted Linux, an Ideal Platform for E-Services Application Hosting, 44 Communications of the ACM 2	Chris Dalton and Tse Huong Choo ACM	February 2001	A-14 B-14
HP Secure OS Software for Linux 1.0 (HP-LX 1.0), Product Reviews	Brian Wilson, Web Techniques, Vol. 7, Issue 1	Jan. 2002	A-14 B-14
Absolute BSD: the Ultimate Guide to FreeBSD ("Absolute BSD")	M. Lucas, No Starch Press	2002	B-10
NetTap: an efficient and reliable PC-based platform for network programming ("Blott")	S. Blott, J. Brustoloni, C. Martin 2000 IEEE Third Conf. on Open Architectures and Network Programming Proceedings, pp. 13-22	Mar. 2000	Background ⁶
Jails: Confirming the omnipotent root	P.H. Kamp, R.N. Watson	May 2000	Background ⁷

⁶ See, e.g., Non-Final Office Action dated October 24, 2024, U.S. Patent App. No. 90/019,676.

⁷ See, e.g., Non-Final Office Action dated October 24, 2024, U.S. Patent App. No. 90/019,676.

Table 2: Prior Art Printed Publications			
Title	Author/Publisher	Date	Appendix
	Proceedings of the 2nd International SANE Conference, 15 pages, available at http://www.sane.nl/events/sane2000/papers/kamp.pdf		

C. Prior Art Systems On Sale and/or Publicly Used

The table below identifies systems and products that were publicly available and/or used, offered for sale, or sold and qualify as prior art to the Asserted Patents under 35 U.S.C. §§ 102(a), 102(b), and/or 102(g). Some or all of the supporting references for these systems, as cited below and in the corresponding Appendices, may also qualify as prior art publications under 35 U.S.C. §§ 102, such as manuals, patents, and other information intended to cover these products and systems, and may be used as invalidating prior art under 35 U.S.C. §§ 102 and 103. Each of the systems identified below includes the identified software running on any supported hardware such as server hardware. In addition, HPE incorporates by reference the individuals identified in its initial disclosures, and HPE also continues to investigate the systems and products and reserves the right to supplement the contentions and accompanying claim charts after further discovery and investigation. HPE also reserves the right to rely on fact or expert witness testimony to establish the public knowledge, use, availability, sale, or offer for sale of any systems described below. Each Appendix identified by an “A” pertains to the ’814 Patent, and each Appendix identified by a “B” pertains to the ’058 Patent. Although additional information and prior art systems may be obtained through discovery, such prior art systems include at least the following:

Table 3: Prior Art Systems			
System/Item	Date(s)	Person/Entity	Appendix
HPE ServiceGuard and HP-UX	Mar. 2002	HPE	A-15

			B-15
HPE Trusted Linux (a/k/a HP Secure OS)	Aug. 27, 2001	HPE	A-14 B-14
Linux VServer (Gélinas)	2002	Jacques Gélinas	A-8
Thinstall	2001-2003	Thinstall	A-11 B-11
Virtuozzo	2002	SWsoft	A-12 B-12
User-Mode-Linux (UML)	1991-2000	Jeff Dike	B-9
FreeBSD	Mar. 14, 2000 ⁸	Freebsd.org	B-10
IBM Storage Tank	Jan. 23, 2002	Pease, IBM	A-13
Softricity System Guard	Jun. 2003 ⁹	Softricity	TBD
VMTP User-Level Implementation	1987 ¹⁰	TBD	TBD
Mac OS X	Apr. 2001 ¹¹	Apple, Inc.	TBD
Solaris Zones	2002 ¹²	Sun Microsystems	A-23 B-24
Alpine	2001 ¹³	Ely, Savage, Wetherall	TBD
Alpine4Linux	Aug. 2003	TBD	TBD

HPE's investigation into prior art systems is ongoing and discovery is only in its early stages. HPE will amend or supplement its disclosures of these systems, as its investigation and discovery continue, including third-party discovery. HPE also reserves the right to rely on fact or

⁸ <https://web.archive.org/web/20000511211421/http://www.freebsd.org/releases/4.0R/announce.html>; Kamp, Poul-Henning, and Robert NM Watson. "Jails: Confining the omnipotent root." In *Proceedings of the 2nd International SANE Conference*, vol. 43, p. 116. 2000.

⁹ Bruce Linsday, "Pupils pry, schools buy" (Network World Canada, June 13, 2003).

¹⁰ Mogul, Jeffrey, Richard Rashid, and Michael Accetta. "The packer filter: an efficient mechanism for user-level network code." *ACM SIGOPS Operating Systems Review* 21, no. 5 (1987): 39-51.

¹¹ <https://www.apple.com/newsroom/2001/03/21Mac-OS-X-Hits-Stores-This-Weekend/>; <https://arstechnica.com/gadgets/2001/04/macos-x/>.

¹² Conceived and diligently reduced to practice, as evidenced by Tucker '080, Tucker '556, Tucker Provisional, and Sun Microsystem's Solaris 10 Operating Environment software.

¹³ See Ely Paper and Ely Presentation.

VII. ADDITIONAL INVALIDITY CONTENTIONS

Precise identification of all of the bases upon which the Asserted Claims are invalid and/or unenforceable, including inequitable conduct, improper inventorship, and the judicially-created non-statutory obviousness-type double patenting doctrine, are likely to be revealed only after further developments in the case, including fact and expert discovery. HPE expressly reserves the right to amend or supplement these Invalidity Contentions to address any additional invalidity arguments that become apparent in view of any relevant facts and information revealed during the course of discovery.

Dated: October 30, 2024

By: /s/ Katharine Burke

Jennifer H. Doan
Texas Bar No. 08809050
Joshua R. Thane
Texas Bar No. 24060713
HALTOM & DOAN
6500 Summerhill Road, Suite 100
Texarkana, TX 75503
Telephone: (903) 255-1000
Facsimile: (903) 255-0800
Email: jdoan@haltomdoan.com
Email: jthane@haltomdoan.com

Katharine Burke (Lead Attorney)
DC Bar Number: 985333
Katharine.burke@bakerbotts.com
Samuel L. Kassa
DC Bar Number: 187255
Sam.kassa@bakerbotts.com
BAKER BOTTS L.L.P.
700 K Street, N.W.
Washington, DC 20001-5692
Tel: (202) 639-7700
Fax: (202) 639-7890

Douglas M. Kubehl
Texas Bar No. 00796909
Doug.kubehl@bakerbotts.com
Morgan Mayne
Texas Bar No. 24084387
Morgan.mayne@bakerbotts.com
Emily Deer
Texas Bar No. 24116352
BAKER BOTTS L.L.P.
2001 Ross Avenue, Suite 900
Dallas, TX 75201-2980
Tel: (214) 953-6500
Fax: (214) 953-6503

David Lien (*pro hac vice*)
California Bar No. 313754
David.lien@bakerbotts.com
BAKER BOTTS L.L.P.
1001 Page Mill Road, Building One,
Suite 200
Palo Alto, CA 94304-1007

Tel: (650) 739-7563
Fax: (650) 739-7663

***ATTORNEYS FOR DEFENDANT
HEWLETT PACKARD
ENTERPRISE COMPANY***

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on October 30, 2024, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via electronic mail.

/s/ Katharine Burke
Katharine Burke